

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

CLAIMS

- 1-17. (Cancelled)
18. (New) Pin separator for a ropeless automatic pinsetter, comprising:
a rotating disc surrounded by a stationary limiting wall in which at least one outlet opening for one single pin is formed, and
a separating element at the outlet opening at a radial distance from the limiting wall, which separates pins arriving lying adjacent one another from one another, so that only one pin can emerge through the outlet opening,
characterized in that
the separating element is formed as a ramp, which extends upwards from the surface of the disc.
19. (New) Pin separator according to claim 18, wherein the ramp is arranged in the direction of rotation of the disc in front of the outlet opening.
20. (New) Pin separator according to claim 18, wherein at the ramp a cover plate is connected which covers the area in front of the outlet opening at the height of the ramp end.
- 21 (New) Pin separator according to claim 18, wherein in the plan view the ramp is arranged inclined to the limiting wall such that the lower, front end of the ramp has a smaller distance from the limiting wall than the upper, back end of the ramp.
22. (New) Pin separator according to claim 18, wherein the ramp is formed as a round rod.
23. (New) Pin separator according to claim 18, wherein connected at the ramp is a partition wall extending approximately vertically to the disc surface and covering the disc surface in relation to the area in front of the outlet opening.

24. (New) Pin separator according to claim 18, wherein a guide element is arranged opposite the ramp at the limiting wall.

25. (New) Pin separator according to claim 24, wherein the guide element extends approximately starting from the lower end of the ramp inclined inwards or curved inwards along the ascending slope of the ramp, so that adjacent the upper end of the ramp the passage between ramp and guide element is narrowed.

26. (New) Pin separator according to claim 24, wherein the guide element is formed as an approximately ribbon-shaped guide area which extends in the side view over and along the upper edge of the ramp.

27. (New) Pin separator according to claim 24, wherein the guide element starting from a radially innermost position falls steeply outward to the limiting wall.

28. (New) Pin separator for a ropeless automatic pinsetter, comprising a rotating disc surrounded by a stationary limiting wall in which at least one outlet opening for one single pin is formed, wherein in front of the outlet opening a guide element is arranged, which forms a pin passage which extends substantially tangentially to the disc surface and has a front limiting line which, starting from the limiting wall, is curved approximately in the direction of the middle of the disc.

29. (New) Pin separator according to claim 28, wherein the guide element is formed approximately block-shaped and has a guide surface abutting on the inner edge of the pin passage.

30. (New) Pin separator according to claim 28, wherein the disc is arranged in front of the outlet opening inclined downwardly away therefrom.

31. (New) Pin separator according to claim 30, wherein the disc has in the middle area thereof a slideway lining, whose outer edge forms the inner edge of a slightly deepened groove between the limiting wall and the edge of the slideway lining.

32. (New) Pin separator according to claim 31, wherein a friction lining is arranged in the groove between slideway lining and limiting wall.

33. (New) Pin separator according to claim 31, wherein the bottom of the groove has the shape of a channel.

34. (New) Pin separator according to claim 28, wherein the direction of rotation of the disc is reversible.